ABSTRACT

In today's cosmetic market, shampoo is one consumer goods that is highly demanded. Its market competition is also very tough. In this situation, a shampoo manufacturing company should find a strategy to produce a high quality product with a good performance, less cost, and less losses. Thus, improvement made must be straight to the point. To achieve that, accountability with hard data and evidence-based decision making is needed. Statistical Process Control provides accountability and is very essential in this quality–performance effort. A statistical process control chart allows us to see the capability of a process, whether a process is working correctly or not, whether the variation is natural or not, and what corrective action that we should take. To measure the capability, a term Cp / Cpk is used. Cp is an indicator for process capability, while Cpk is adjustment for Cp for the effect of non-centered distribution. In this paper, we will focus on improving the filling capability of a shampoo production process. A good filling capability is shown by Cp > 1.33 and Cpk > 1.67. Based on the study that has been done, it can be concluded that by having a good setting parameter, shut-off nozzle, flowmetric filling machine, proper size of hopper, and compherensive training for operators, capability issue of the filling machine can be solved.

Keyword – statistical process control, control chart, production, filling capability, shampoo, control parameters